Transport Canada Transports Canada

TP 6980E

Issue 1/2004

feedback

Canadian Aviation Service Difficulty Reports

table *of* ***contents***

hangar noise

A Message for Aircraft Maintenance Personnel

AIRCRAFT MAINTENANCE ENGINEER (AME) SYMPOSIA

To date, Continuing Airworthiness (CAW) has participated at three annual AME symposia held in Toronto, Montréal and just recently, Vancouver.

The CAW theme for the 2003 & 2004 symposia is "Beyond the SDR (Service Difficultly Report)...," covering the various means of corrective action developed and disseminated by Transport Canada, Continuing Airworthiness.

The *Feed-Back* publication, Airworthiness Notices, Service Difficulty Advisories and Service Difficulty Alerts are briefly covered in this 45 minute presentation, as well as a slightly more in-depth look at Airworthiness Directive development, which Airworthiness Directives "apply to you," and the Alternate Means of Compliance (AMOC) process.

The presentations delivered were quite well received and the feedback was most positive.

We wish to entertain suggestions from you, the industry, for topics related to continuing airworthiness for future presentations. Suggestions for other topics related to CAW such as Aging Aircraft, SDR program, are welcomed and can be sent to SDRS@tc.gc.ca.

Please feel free to forward any ideas or suggestions directly to our attention, or come and speak to us at one of our next symposia. See the schedule below.

2004 AME SYMPOSIA/TRADE SHOWS/WORKSHOPS

CENTRAL *March 3-5*	WESTERN *March 24-26*	ATLANTIC *April 29 to May 1*
Best Western Victoria Inn (Winnipeg Airport)	Coast Plaza Hotel & Conference Centre	CASINO Nova Scotia Hotel
1808 Wellington Avenue Winnipeg, MB R3H 0G3	1316 33rd Street NE Calgary, AB T2A 6B6	1919 Upper Water Street Halifax, Nova Scotia B3J 3J5
Tel: 1 800 928-4067 or 204 786-4801 **Fax:** 204 786-1329	**Tel:** 1 800 661-1464 or 403 248-8888 **Fax:** 403 248-0749	**Tel:** 1 866 425-4329 or 902 421-1700 **Fax:** 902 422-5801
Internet: www.vicinn.com	**Internet:** www.info@calgaryplaza.com	**Internet:** www.casinonovascotia.com

For more information or copies of **feedback** or other Civil Aviation publications, call 1 800 305-2059 or visit our Web site at www.tc.gc.ca/civilaviation/certification.

To ensure continued delivery, send any address changes to:
Transport Canada, Civil Aviation Communications Centre (AARA), Place de Ville, Ottawa, ON, K1A ON8.

Notice/Disclaimer:

Service Difficulty Reports (SDR) are normally published verbatim. Transport Canada assumes no responsibility for the accuracy or content of any of these reports. Only grammatical or spelling errors are corrected and content may be reduced as well as personal references deleted.

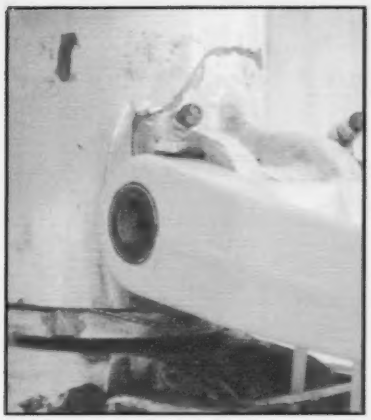
Cover Photos: *The newly certified Challenger 300 courtesy of Bombardier Aerospace Ltd.*

Cette publication est aussi disponible en français.

fixed wing

BEECH A100 KING AIR SDR # 20030317008

Landing Gear Upper Brace Assembly Cracked



After a pilot reported the R/H main gear oleo was low, maintenance attempted to inflate the oleo with nitrogen. The nitrogen immediately started to leak from a large crack around the upper torque knee boss on the brace assembly, P/N 50-8103327. The crack was approximately six inches in length starting at the bottom of the brace assembly, going up the radius on the left side of the boss and turning, crossing over the top of the boss. The submitter also added that this gear had 277 cycles since inspection.

The submitter has determined that this was not the result of a hard landing. They suspect that stress in the radius area caused the crack. This particular upper brace assembly, P/N 50-8103327, was only installed on the aircraft with serial numbers 1 through 161. Raytheon has two other upper brace models in service (P/N 50-810332-3 & 99-810028-7) that are employed on the later King Air models. The submitter also added that these upper braces are machined differently in the area that the crack was discovered.

BEECH 1900 SDR # 2003101001

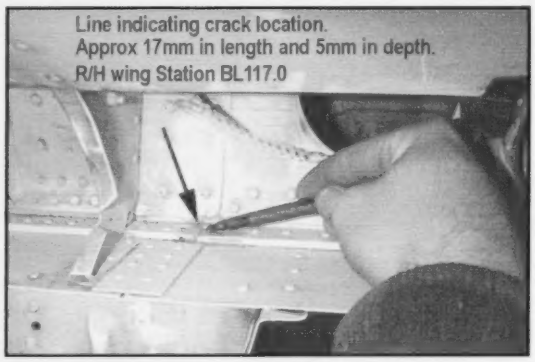
Spar Cap Cracked

A crack was found in the R/H lower spar cap, P/N 1181200291, horizontal flange at Station BL117.0. The crack extended from the rivet hole aft to the edge of the flange and forward, just shy of the flange radius (of the vertical leg).

Maintenance personnel noticed the crack on a pre-flight inspection. The manufacturer was contacted and an approved repair was initiated to splice in a new piece of the lower cap.

Part Time Since New (TSN): 16961 hours

Part Cycles: 25489



Meticulously inspecting in "hard to see" areas may result in significant findings. Well Done!

BOMBARDIER CANADAIR CL600 2C10 (RJ) SDR # 20031127014

EICAS Affected by Lightning

During descent through 7000 feet, the aircraft was hit by lightning on the forward right side of the cockpit fuselage area. At this time, the engine indication and crew alerting system (EICAS) message "R ENG" flameout illuminated and the R/H engine parameters rolled back. After a few seconds, the engine parameters returned to normal and the engine operated normally.

Following an uneventful landing, maintenance personnel discovered that the lightning strike had entered the R/H NLG door and had exited through the trailing edge of the horizontal stabilizer.

Subsequent inspection of the R/H engine revealed no apparent damage. Maintenance investigation later confirmed that the engine flameout EICAS message was due to the N2 parameters going below idle for a few seconds.

It is possible that the lightning strike affected the EICAS computer and/or related systems that provide engine status, advisory, caution and warning displays to alert the cockpit crew.

CESSNA 152M SDR # 20031211001

Fuel Line Corroded

During a routine inspection, it was detected that the fuel line had a rough look to the surface. Removing the center console cover and peeling back the carpet provided access to the fuel line.

Closer examination of the line revealed deep corrosion pits and residue that was probably caused by the fuel line making contact with the moisture-soaked carpet.

The line is routed from the floor through a cutout and clamped where it then connects to a union fitting. This is on the right side of the console and adjacent to where the instructor's left foot would be resting. Moisture from his/her footwear is absorbed into the carpet and inconspicuously rests along the fuel line where it exits the floor. The carpet is normally tucked under the console for neatness. The line was removed and replaced with a new part. The console will be re-installed with the edge of the carpet resting over the base of the console.

Contaminates carried from the tarmac can easily be transferred from your footwear to the aircraft. Special attention must be given to areas that are prone to this form of exposure. Corrosion inhibitors and more frequent inspections are recommended.

CESSNA 172M SDR #20030530009

Fuel Contaminated

Following a rental arrangement, the pilot was doing his pre-flight inspection when he noticed that one of the fuel caps was completely off. It had been raining the previous two days and he decided to drain the fuel tank sump of any residual water. When the fuel tank sump was drained, the pilot thought that he was seeing aviation fuel, when in fact; it was water. He then completed the pre-flight inspection, started the aircraft and went flying. After reaching 2500 hundred feet (indicated), the engine sputtered and quit. The pilot re-started the aircraft and immediately returned to the airport. After landing, the engine continued to run rough and then quit once again.

The aircraft fuel system was completely drained and then refueled. Fuel sampling was completed with no evidence of water.

The presence of any contamination in fuel systems is dangerous. Laboratory and field tests have demonstrated that when water is introduced into the fuel tank, it gradually settles to the bottom. Ensure that fuel sumps are regularly drained.

Regular draining of fuel sumps often collects small amounts of accumulated water. It is not normally expected to discover large amounts of water when draining sumps. This incident illustrates the importance of not only draining the fuel sumps; but also to inspect the drained contents for smell, color and consistency.

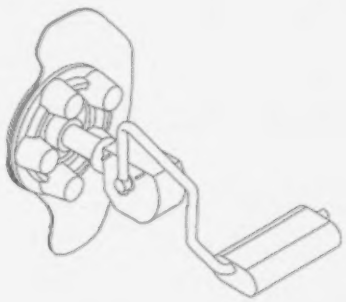
CESSNA 172R SDR # 20031104002

Fuel Level Sending Unit - Wrong Part Number

Upon compliance of the fuel quantity indicators performance test (annual item), it was noted that the L/H wing fuel level sending unit transmitter, P/N S3331 1, did not go to zero (indicated slightly above the '0' reading on the gauge).

Further inspection revealed that the transmitter arm was resting on a stringer inside the tank. It was determined that the transmitter installed in the L/H wing was the part number for the R/H wing. The correct sending unit was installed and the system functions normally.

This aircraft was delivered from the factory with this installation.



CESSNA 310 SDR # 20031127011

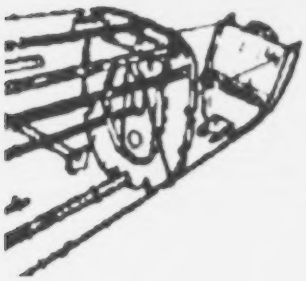
Bulkhead Cracked

During the 100-hour inspection, play was noticed in the nose gear area. Upon inspection, the L/H nose section bulkhead, P/N 08130225, was found to be cracked vertically though the centre of the lightening hole.

Doubler patches were installed and riveted into place.

Transport Canada has two other SDRs in the database with similar descriptions. An extra verification of this problematic area could prevent serious damage to your aircraft.

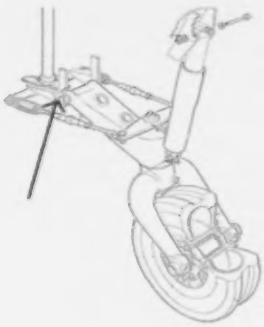
DE HAVILLAND DHC 2 SDR # 20030205001



Tail Wheel Attach Cracked

During changeover from floats to wheels, a crack was found on the tail wheel attachment lug.

The crack was on the L/H forward attaching bracket of the tail wheel. This bracket, P/N C2FS1083-3, also attaches the horizontal stabilizer on the upper pickups. The damaged bracket was replaced with a new unit.



Wobble Pump Leaking SDR # 20030918009

Upon inspection the wobble pump, P/N 19AF, was found to be leaking fuel from the diaphragm/seal area during a system pressure test. The overhaul facility confirmed that the seal and O-rings were old and in need of replacement.*This component had accumulated 10, 300hrs.*

Close inspection and/or disassembly must be completed to ensure integrity of internal synthetic parts of these older components.

DE HAVILLAND DHC 3 SDR # 20030915004

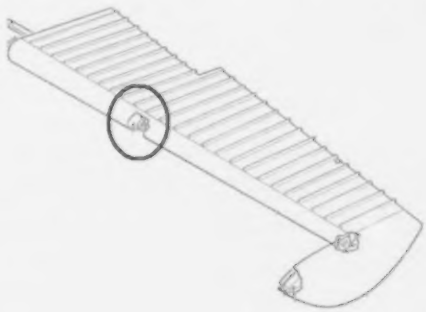
Elevator Center Hinge Attach Point Cracked

The L/H elevator front spar, P/N C2-TE-37ND, upper attach hole for centre hinge had a small radial crack around the upper AN3 bolthole.

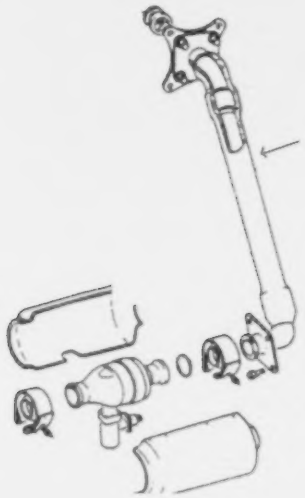
Transport Canada has received three similar reports of cracking at the elevator front spar center hinge attach point. The defects were discovered during inspection.

The cracking is occurring radially around the attachment bolthole.

To ensure similar defects are detected, Transport Canada recommends operators of this aircraft model; pay close attention to this area during inspection or whenever maintenance allows access.



DE HAVILLAND DHC 6 SDR #20031008005



Nacelle Bleed Air Line Ruptured

The pilots had the beta backup system on the R/H engine fail in flight. It was discovered by the engineer that the bleed air line, P/N C6VW10263, had ruptured in the braided area where it leaves the engine compartment and goes into the wing.

The wire bundle sustained damage by the bleed air, which resulted in the harness shorting out causing the beta light failure. The line was original and was corroded from the inside out.

Removal and close inspection of this line during inspection may have prevented this failure.

DE HAVILLAND (GRUMMAN) - DHC CS2F 2 Tracker SDR # 20030911004

Inboard Aileron Hinge Broken

Upon return, from performing a firebombing mission, the pilot complained of flutter in the controls, however, an initial inspection revealed no damage. A further in-depth detailed inspection revealed a broken L/H wing inboard aileron hinge.

Due to the condition of the hinge, it was determined to have happened some time before, and because it could not be determined when the failure occurred, both hinges were replaced due to potential stress the breakage applied on the undamaged hinge.

The aileron hinges were Non-Destructive Tested at 315.9 hours previously, during the aircraft's airframe extension program.

This problem is currently under investigation by the manufacturer.

DOUGLAS DC 9 SDR #20031204001

Component Screens Contaminated

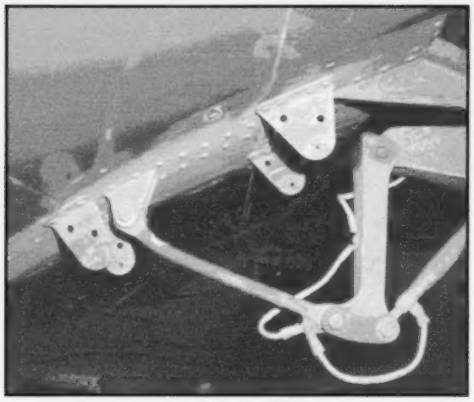
The Captain's electronic attitude direction indicator (EADI) and electronic horizontal situation indicator (EHSI) went blank twice during descent and approach. Each time they stayed off for about 5-10 seconds, then came back on.

Maintenance swapped the symbol generator #1 with #2 and could not duplicate the snag on ground. The aircraft was then dispatched as serviceable.

The suspected problem related with bad ventilation. The HSI and ADI screen were found packed with dust.

Remember to keep all screens (including those forming part of the components) in the airflow to instruments free from contamination to allow proper cooling.

PILATUS PC12-45 SDR # 20031208006



Flap Fairing Bent

An operator was performing a 100-hour inspection and found the L/H wing flap aft link, P/N 527.52.12.133, bent at the center flap position.

The flap fairings were removed and all linkages were inspected. No faults were found on the R/H flap that was inspected.

The operator suspects ice/slush FOD from the runway may have filled the fairing and froze. When the flaps were selected, it interfered with the aft linkage causing it to bend.

PIPER PA 31T2 SDR # 20030313003

Pneumatic Pressure Leak

The crew noticed multiple avionic failures on approach. The VOR signal strength was very weak, and the #1 radio and most navigation equipment were inoperative.

The pneumatic pressure was noted at 21 PSI, when it should have been at 18 PSI. The pneumatic regulator valve, P/N 584228(1H5210), had failed. This failure caused hot air to be released at the pressure relief valve, which is located in close proximity to an antenna coaxial cable bundle. The hot air hardened and damaged the cables, causing the avionic failures mentioned above.

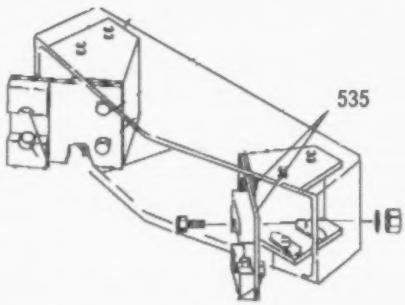
SAAB SF340A SDR # 20031104001

Rudder Stop Problem

The pilot reported a rudder travel problem with temporary stiffness at end of travel.

Investigation revealed the L/H rudder stop pad attaching bolt, P/N NAS6203, became loose and broke. The area was inspected and the bolt replaced.

Reference: IPC 55-50-00-02, Item 535.



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rotorcraft

BELL 206L SDR # 20031029007

Engine Mount Pin Corroded

During a special inspection of engine mount legs introduced on an operator's Bell 206L/L1 aircraft, the lower pins, P/N 100-048-5-12, were found severely corroded. One of the pins was severed.

A varying degree of corrosion was also observed on the inner diameter of the engine mount legs. Some legs were rejected upon preliminary inspection.

The operator has introduced a mandatory 3-year corrosion inspection of the Bell 206L engine mount legs requiring removal of pins and disassembly of legs.

Keep this in mind when inspecting this area. Disassembly for further inspection may be required. These engine mounts may be employed in earlier Bell 206L models. Stainless steel mounts are now incorporated in Bell 206L models.

propellers

BEECH 300 KING AIR SDR # 20030317008

Propeller Ground Pitch Solenoid

Upon landing, the pilot had difficulty controlling the aircraft. The runway had been recently cleared but still had residual snow and ice patches. As the aircraft began to decelerate, rudder deflection became ineffective and directional control more difficult. The aircraft began an uncontrollable drift into the snow bank; where it came to rest.

Initial maintenance reports stated that the L/H propeller was found to be in a fine pitch position with the blades bent back 90 degrees from direction of rotation. The R/H propeller blades were found to be 180 degrees from the feathered position and all blades were bent back in the direction of rotation. Evidence of the propeller marks in the snow bank indicated that the L/H propeller was in a fine pitch position by the thin cuts in the snow bank. The R/H propeller appeared to be in a feathered position by evidence of large propeller paddle marks in the snow bank.

Subsequent analysis by a propeller overhaul shop stated that the L/H propeller ground pitch solenoid was uncoupled during roll-out. This situation caused the L/H propeller to go to a "flight idle pitch" (+ 13 degree) position; while the R/H propeller remained in "ground fine pitch" (-3 degree). This resulted in an adverse, uncontrollable aircraft yaw to the right during the landing phase.

Subsequently, Raytheon Service Bulletin (SB) 61-3125 titled "Propeller - Improved Ground Idle Low Pitch Stop and Annunciator Light" and associated Kit #130-9600-1 was installed. This SB modification adds an improved ground idle solenoid system to both engines.

A search of the SDR data base reveals numerous in-service problems associated with the ground pitch solenoid both on the Beech 300 and 1900D series aircraft. Transport Canada recommends that all operators consider the modification of their aircraft with manufacturer's Service Bulletin 61-3125.

CONGRATULATIONS...

to the following people who have won our door prize at the previous symposia!!!!

Laurie Chmielewski (Toronto)

Barry (Bam-Bam) McDonald (Vancouver)

engines

BOEING 727 SDR # 20030718001

Tail Pipe Fire

During maintenance troubleshooting of the #3 engine ignition system, a ground auxiliary air start unit (ASU) was used for engine start because the aircraft auxiliary power unit (APU) was inoperative. During #3 engine startup, no exhaust gas temperature (EGT) indication was observed and the engine was shutdown. Following maintenance crew inspection of the #3 engine area, a second attempt to start #3 engine was once again aborted.

Shortly thereafter, ground personnel alerted the cockpit maintenance crew of a tailpipe fire. Before the airfield fire trucks arrived, the cockpit crew extinguished the fire by using the aircraft engine fire suppression system. Additionally, the ASU hose caught fire but was successfully extinguished by ground personnel.

Subsequent investigation revealed that excess fuel left over from two aborted engine starts had been ignited by a igniter plug that had not been re-installed following maintenance troubleshooting. The ASU caught fire due to excess (unburnt) fuel that had dripped onto the ASU hose.

Transport Canada reminds maintainers of the requirement to ensure that all aircraft maintenance activities be properly recorded and cleared prior to aircraft operation.

SIKORSKY S64 SKYCRANE SDR # 20030331006

In-flight Shutdown (IFSD) - Cold Weather Related Problems

The aircraft had been left outside overnight with no engine inlet covers installed, requiring extensive pre-heating to remove large amounts of snow and ice. Following start, the #1 engine took noticeably longer to light off. Shortly thereafter, with both engines functioning normally, the rotorcraft lifted off.

Approximately 10 minutes into the first flight; the pilot noticed that the engine parameters were unmatched. An attempt to match the engine parameters using beeper trim was unsuccessful. As the N2 rpm speed of the #1 engine continued to climb; the collective was kept at a high setting in an attempt to prevent N2 overspeed. The pilot attempted to throttle back the engine, but was unsuccessful due to frozen throttle cables.

When the external load was released, the #1 engine began to surge excessively. Soon after, the over-speed protection feature of the FCU automatically shut down the #1 engine. The pilot was then safely returned to base.

Maintenance personnel carried out a detailed inspection of #1 engine and its related control linkages. A considerable amount of ice was found in the engine P3 sense line as well as a N2 beep motor that did not function properly. Following replacement of the FCU and beep motor; extensive engine ground run-up checks were successfully carried out.

The operator concluded that the root cause of this incident was due to trapped moisture that had became frozen overnight and later blocked the P3 sensing line. The blocked P3 pressure sensing line gave the FCU an erroneous input signal, which increased fuel flow to the engine and caused the engine overspeed. The problem was compounded by a frozen throttle control, which could not be used by the pilot to retard the engine speed.

Transport Canada reminds all operators review their respective cold weather operating procedures. Always install engine inlet covers or where possible, preferably hangar your aircraft during inclement weather.

heads UP

FAILED RUDDER PEDALS

BELLANCA 8GCBC SDR #20030825002

Rudder Pedal Cracked

An AME, performing a visual inspection of the cockpit area before the aircraft was to depart for flight, noticed a crack on the face of the rudder pedal, P/N 315371.

Further investigation revealed that the crack continued around the back and into one of the main attach points.

DE HAVILLAND DHC 6 SDR # 20030723003

Elevator Center Hinge Attach Point Cracked

The captain's rudder pedal broke off the axle when applying the brakes to release the parking brake. While examining the pedal, a darkened area in the area of the break was visible indicating it was cracked prior to the failure.

The rudder pedal was replaced and the aircraft returned to service. An examination of five other aircraft in the fleet showed no discrepancies.

Aircraft Total Time: 21,139.9 hours

Aircraft Total Cycles: 25,499

We have recently received several reported occurrences of failed rudder pedals like the above two articles, on a variety of aircraft. Rudder pedals are, by nature of installation, difficult to inspect on-scene. Removal and disassembly for a complete thorough inspection should be given consideration, even if not specifically identified within the inspection document.

feedback

Our Cover:

Transport Canada (TC) and Bombardier Aerospace (BA) reached yet another milestone on May 31, 2003, when the Challenger 300, a mid-size business jet, obtained its Type Certificate. This was soon followed by FAA Type Certification on June 4, 2003 and JAA Certification one month later.

equipment ADs

Transport Canada (TC) endeavours to send copies of new airworthiness directives (ADs), which are applicable in Canada to the registered owners of the affected products. Equipment/appliance ADs are often only distributed to our regional offices because the owners of aircraft affected by this type of AD are not generally known.

The following new equipment ADs have been received by TC in the last three months. AMEs and operators of the affected products are encouraged to obtain further information or a copy of the ADs from their regional TC office, their local TCC, their PMI, or from the Civil Aviation AD website at:

http://www.tc.gc.ca/civilaviation/certifcation/continuing/ad.htm

Manufacturer	Ad Number	Origin	Description
MARS SPOL SRO	076/2003	CK	Pilot rescue parachute - Ripcord pin - Inspection MARS S/B M ATL-01A, CAPEWELL S/B CW03-01
Titeflex Corporation	2003-23-05(CORR)	US	Inspection of hoses- BOEING 737, 747, 757, 767 SERIES A/C

suspected Unapproved PARTS

The submitters of the following Service Difficulty Reports (SDRs), received during the previous quarter, indicated that an unapproved part (SUP) was suspected. The list is provided here for information only and should not be construed as an identification of confirmed unapproved parts. In Canada, SUPs should be reported indicating your suspicion of an unapproved part on a regular SDR form or on the Internet at:

www.tc.gc.ca/wsdrs

SDR # 20031127005

PART NAME: L/H & R/H TUNNEL ANGLE

AIRCRAFT MAKE: CESSNA 182K

PROBLEM DESCRIPTION

The cabin floor on the R/H side had moved down. Upon investigation it was found that the L/H and R/H tunnel angles had broken and cracked. Both angles, P/N0713671-3 and -4, were then removed.

These parts were not made by Cessna, and there was no record of a repair found in the technical logs.

FAA Unapproved PARTs Notification (UPNs)

Published by: FAA, AIR-140, P.O. Box 26460, Oklahoma City, OK 73125. UPNs are posted on the Internet at: **http://www1.faa.gov/avr/sups/**

No. 2002-00006 issued January 7, 2004

AFFECTED AIRCRAFT

All aircraft.

PURPOSE

The purpose of this notification is to advise all aircraft owners, operators, manufacturers, maintenance organizations, and parts suppliers and distributors regarding parts sold with falsified documentation.

BACKGROUND

A joint suspected unapproved parts investigation conducted by the Federal Aviation Administration (FAA) and the Defense Criminal Investigative Service revealed that Amanullah Khan (aka Wali Merchant) and Ziad Jamil Gammoh, operating as United Aircraft & Electronics (UAE), 1140 N. Kraemer Avenue, Suite H, Anaheim, CA 92806, falsified documents associated with the sale of aircraft parts.

Beginning January 2000, UAE sold surplus or used aircraft parts as new parts with falsified certificates of conformance, invoices, and FAA Forms 8130-3 (Airworthiness Approval Tags). UAE added false dataplates, stamps, and serial numbers to reworked parts.

Examples of the parts sold by UAE include:

- Bell Helicopter ***grip assemblies,*** part no. 204-011-728-19, with false dataplates indicating that the parts were part no. 205-011-711-101.
- Reworked ***turbine vanes and blades*** with counterfeit Pratt & Whitney stamps and packaging.
- ***F-16 end aft dummy loads***, part no. 16E3564-1, with falsified Alcoa certificates of conformance.
- Bell Helicopter 214 ***wear sleeves***, part no. 214-040-867-101, sold with falsified Bell Helicopter Textron invoices.

Note: Evidence indicates that these are only some of the parts that UAE may have sold with falsified documentation; therefore, all parts purchased from UAE should be considered suspect.

RECOMMENDATIONS

Regulations require that type-certificated products conform to their type design. Aircraft owners, operators, maintenance organizations, and parts suppliers and distributors should inspect their aircraft, aircraft records, and/or parts inventories for any parts purchased from UAE, or parts with documents signed by Amanullah Khan (aka Wali Merchant), Ziad Jamil Gammoh, or Oscar Munoz.

All parts purchased from UAE should be considered suspect and quarantined to prevent installation until a determination can be made regarding each part's eligibility for installation.

FURTHER INFORMATION

Further information concerning this investigation and guidance regarding the above-referenced parts may be obtained from the FAA Manufacturing Inspection District Office (MIDO) or the FAA Flight Standards District Office (FSDO) given below. In addition to the above recommendations, the FAA would appreciate any information concerning the discovery of the parts, the means used to identify the source, and the action taken to remove any part from service.

FAA UPNs (cont'd)

For additional information, contact the FAA Los Angeles MIDO, 3960 Paramount Blvd., Lakewood, CA 90712-4137, telephone (562) 627-5291, fax (562) 627-5319 or the FAA Long Beach FSDO, 5001 Airport Plaza Drive, Suite 100, Long Beach, CA 90815, telephone (562) 420-1755, fax (562) 420-6765. This notice was published through the FAA Suspected Unapproved Parts Program Office, AVR-20, telephone (703) 668-3720, fax (703) 481-3002.

No. 2003-00155 January 14, 2004

AFFECTED AIRCRAFT

Lockheed C-130/L-100 series.

PURPOSE

The purpose of this notification is to advise all aircraft owners, operators, manufacturers, maintenance organizations, and parts distributors regarding improper maintenance performed on accessories applicable to Lockheed C-130/L-100 series aircraft.

BACKGROUND

Information received during a Federal Aviation Administration (FAA) suspected unapproved parts investigation revealed that Airborne Technologies, Inc. (Airborne), located at 999 Avenida Acaso, Camarillo, CA 93012, improperly approved for return to service accessories applicable to Lockheed C-130/L-100 series aircraft. Airborne previously held Air Agency Certificate No. WY2R283L.

Evidence indicated that Airborne failed to accomplish maintenance on various accessories in accordance with current manufacturers' maintenance manuals or Instructions for Continued Airworthiness, or other FAA-accepted procedures. Discrepancies noted include the failure to perform certain nondestructive testing required by manufacturers' maintenance manuals. Evidence also indicated that Airborne did not possess all the test equipment required to accomplish test procedures per overhaul instructions. The FAA has been unable to determine the exact time span during which these improprieties occurred; therefore, all accessories overhauled by Airborne are considered suspect.

RECOMMENDATION

Regulations require that type-certificated products conform to their type design. Aircraft owners, operators, manufacturers, maintenance organizations, and parts distributors should inspect their aircraft, aircraft records, and/or aircraft parts inventories for any accessories that Airborne maintained. If any accessories maintained by them have been installed on aircraft, appropriate action should be taken. If any are found in existing aircraft stock, it is recommended that the accessories be quarantined to prevent installation until a determination can be made regarding their eligibility for installation.

FURTHER INFORMATION

Further information concerning this investigation may be obtained from the FAA Flight Standards District Office (FSDO) given below. The FAA would appreciate any information concerning the discovery of the above-referenced accessories from any source, the means used to identify the source, and the action taken to remove these accessories from service.

For additional information, contact the Van Nuys FSDO, 16501 Sherman Way, Suite 330, Van Nuys, CA 91406, telephone (818) 904-6291, fax (818) 786-9732. This notice was published through the Suspected Unapproved Parts Program Office, AVR-20, telephone (703) 668-3720, fax (703) 481-3002.

FAA Special Airworthiness Bulletins (SAIBs)

An SAIB is an information tool that alerts, educates, and makes recommendations to the general aviation community. It is non-regulatory information and guidance that does not meet the criteria for an Airworthiness Directive (AD).

http://www1.faa.gov/certification/aircraft/av-info/ad/saibs.htm

SAIB #	Manufacturer	Model	Issue Date
SW-04-38	Eurocopter France	EC120B Helicopters	12/24/2003
NM-04-37	Transport Category Aircraft Seatbelt attachment fittings		12/22/2003
SW-04-35	Eurocopter France	AS350B, BA, B1, B2, B3, D, AS355E, and EC120B Helicopters	12/19/2003
SW-04-36	Robinson	R22 Helicopters	12/17/2003
CE-04-22	Reciprocating engine-powered airplanes Exhaust System Components		12/17/2003
CE-04-34	Tiger Aircraft LLC (American General)	AA-5A, AA-5B, and AG-5B	12/11/2003
CE-04-33	Commander Aircraft Company (Rockwell International)	112 and 114	12/11/2003
CE-04-32	Alexandria Aircraft LLC (Eagle& Bellanca)	DW-1	12/10/2003
CE-04-31	B-N Group Ltd. (Britten-Norman)	BN2, BN2B, BN2T (Islander) series	12/09/2003
CE-04-30	British Aerospace (BAE Systems)	Jetstream 3200 series	12/09/2003
CE-04-28; -29	Zenair Ltd.	CH2000	12/09/2003
CE-04-25;-26;-27	SOCATA	TBM 700	12/04/2003
CE-03-59R1	SCHEMPP-HIRTH	Discus b, Discus bT, Discus CS	12/02/2003
CE-04-24	Loral Fairchild (now L-3 Communication – Aviation Recorders) Flight Data Recorders (FDR)		12/02/2003
CE-04-23	Air Tractor, Inc.	AT-300, AT-301, AT-302, AT-400,, AT-400A AT-401, AT-402, AT-602, AT-802, AT-802A	12/02/2003
CE-04-21	Chelton Avionics System	Multiple Models	11/20/2003
CE-04-19; -20	SOCATA	TBM 700	11/20/2003
CE-04-18	Aerostar International	S-77A Balloons	11/14/2003
CE-04-17	Dornier Luftfahrt GmbH	228 Series	11/14/2003
CE-04-16	SOCATA	TBM 700 11/12/2003	
CE-04-15	Piper	PA-32, PA-28-235 and PA-28-236 series	11/12/2003
SW-03-08R1	Rotorcraft	Turboshaft-powered rotorcraft	11/10/2003
SW-04-13	Schweizer Aircraft Corporation	269C	11/07/2003
CE-04-10	Goodrich Avionics Systems, Inc.	SKY899 SkyWatch HP TAS/TCAS I transponders (on multi acft)	10/29/2003
CE-04-12	Slingsby	T67A, T67B, T67C, T67M, T67M-MkII, T67M200, T67M260, T67M260-T3A	10/28/2003
CE-04-11	Cessna	182, 182A, 182B, 182C, 182D, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q and R182	10/28/2003
CE-04-07; -08; -09	SOCATA	TB 9, TB 10, and TB 200	10/22/2003; 10/27/2003
CE-04-05; -06	Slingsby Aviation	T67B, T67C, T67M, T67M-MkII, T67M200, T67M260, and T67M260-T3A	10/20/2003; 10/20/2003
CE-04-04	Raytheon (Beech) Aviation	Twin Bonanza B50, C50, D50, D50A, D50B, D50C, E50, F50, G50, H50, J50, Baron 55, A55, B55, E55, 58, 56TC, A56TC, Travel Air 95, B95, B95A, D95A, E95	10/16/2003
CE-04-03	Cessna Aircraft Company and Reims Aviation	172, 180, and 185 series	10/8/2003
CE-04-02	Raytheon Aircraft Company	390	10/7/2003
CE-04-01	Cessna	T182	10/2/2003

service difficulty *reports*

Received by Transport Canada from
1 October to 31 December 2003

aircraft

MAKE/MODEL	ATA	PART NAME	PART NO.	PART CONDITION	SDR NO.	RGN
AERO COMMANDER						
690	5751	SPAR	250000283	CRACKED	20031113004	PAC
690A	5530	CENTER SPAR	41000823	CRACKED	20031106013	PAC
690A	5530	CHANNEL	41000885	CRACKED	2 SDRs	PAC
690A	5751	AILERON SPAR, L/H	250000283	CRACKED	20031114009	PAC
AEROSPATIALE						
AS 350B	6730	SAME	SAME	UNSERVICEABLE	20031031008	PNR
AS 350B	7170	SAME	SAME	UNSERVICEABLE	20031031009	PNR
AS 350BA	2900	BELT	704A336900004	DELAMINATED	20031127010	ONT
AS 350BA	6410	TAIL ROTOR BLADE	355A12004008	CRACKED	20031113010	PAC
AS 350B2	5622	ELT			20031119009	PAC
AS 350B2	6220	SPHERICAL STOP	704A3363320851	WORN (DEBOND)	20031120007	ONT
AS 350B2	6520	TAIL MOTOR GEAR	B350A33020005	MAKING METAL	20031015013	ONT
AS 350D	2810	FUEL QUANTITY	SE7583552	BROKEN	20031015020	PAC
AS 355F1	2897	CONNECTOR		BURNT	20031114007	PAC
AIR TRACTOR						
AT 802	5510	AUX FAN ASSY	306511	CRACKED	20031210005	PAC
AT 802	5510	EYEBOLT	AN4730A	CRACKED	2 SDRs	PAC
AIRBUS						
A310 308	2597	TRANSFORMER	224695	BURN SMELL	20031021006	QUE
A319 114	3320	BALLAST	325070		20031015004	QUE
A320 211	2330	VIDEO SYSTEM CONTROL			20031015005	QUE
A320 211	2897	WIRE	E0437DL20	DAMAGED	20031021002	NCR
A320 212	2530	POWER MODULE ASSY		BURNT	20031118002	ONT
A320 214	0000	NIL/UNKNOWN			20031223002	QUE
A321 211	2530	BUFFET/GALLEYS			20031202005	QUE
A330 243	1200	LEFT ATTACH PLATE		CRACKED	20031024001	QUE
A330 343	2752	ROTARY ACTUATOR	697511007		20031106001	QUE
BEECH						
A100	2600	SWITCH	1199111992	SEPARATED	20031008001	ONT
A100	2810	FUEL TANK		FAILED	20031001004	PNR
A100	2820	ONE-WAY VALVE			20031017009	PNR
A100	3210	UPPER BRACE ASSY	508103327	CRACKED	3 SDRs	ONT
A100	5340	FWD UPPER WING BOLT	817851223		20031203007	PNR
A100	5341	BOLT	817851223		20031203008	PNR
A100	5711	CONNECTOR, ATTACH	0001102501	CRACKED	20031127003	ONT
A100	5740	WING, ATTACH FITTING			20031203009	PNR
B200	5610	WINDSHIELD RH	10138402524	CRACKED	20031205001	PNR
B200	7110	DUCT - COWLING ASSY	10191004911	CRACKED	20031031010	PNR
B200C	5260	DOOR LATCHING CABLE	1015141439	FRAYED	20031117014	ONT
B300	5610	WINDSHIELD ASSY	10138402522	CRACKED	20031009002	QUE
C90	2730	ELEVATOR BELLCRANK	5052441029	INTERFERENCE	20031118006	ONT
C90	5610	LEFT WINDSHIELD	5042006935	SHATTERED	20031107014	ONT
C90A	3230	CLEVIS	1145802283	OUT OF RIG	20031007004	ONT
C90A	3457	GPS SWITCHING UNIT	AIS20035	FAILED	20031006003	ONT
C90A	5521	RIB	50610000415	CRACKED	20031006004	ONT
C90A	7220	DUCT ASSY AIR INTAKE	1099100299	CRACKED	20031118005	ONT
C90A	7510	INTAKE ANTI-ICE	9091010017	CRACKED	20031006006	ONT
100	3230	PINION	1158100283	GEAR TOOTH CRACK	20031028003	PAC
100	5522	BALANCE WEIGHT SUPPORT	10061004217	LOOSE	20031022006	PNR
100	5540	UPPER RUDDER HINGE	11564000035	LOOSE	20031022008	PNR
1900C	2731	SHAFT	335240253	SHEARED	20031027008	ATL
1900C	5210	PASSENGER/CREW DOOR			20031218003	PAC
1900D	2430	GENERATOR CONTROL	51538001A		20031029008	PAC
1900D	3460	FLIGHT CONTROL	P6225798022		20031223001	PAC
1900D	5711	SPAR CAP	1181200291	CRACKED	20031010001	ONT
1900D	731	L.P. FUEL PUMP	1143890425	LEAKING	2 SDRs	ONT
200	2300	WIRING HARNESS		CHAFED	20031114004	PNR
200	3310	RESISTOR,FLUORESCENT	2K40F3	UNSERVICEABLE	20031203010	PNR
200	5610	R/H CO-PILOTS WINDOW	1013840251	SHATTERED	20031017007	PNR
58	3230	ROD END	ADNE5323		20031016002	PAC
99	5230	CARGO/BAGGAGE DOOR			20031120006	PAC
99	6120	PROPELLER CONTROL			20031027004	PNR
99A	3260	LANDING GEAR POST			20031209005	PAC
BELL						
205A 1	5340	UPPER LIFT FITTING	212030154001	CRACKED	20031001006	ONT
206B	2810	FUEL CELL	2080616751	LEAKING	20031209003	PAC
206B	2822	CARTRIDGE	1C2710FR	STOPPED PUMPING	20031015006	PAC
206B	3210	HI-SKID GEAR FLT STEP		BROKEN	20031124003	NCR
206B	3211	SUPPORT L/H & R/H	206031301025	CRACKED	20031117009	ONT
206B	5302	FITTING	206031329001	CRACKED	20031126007	ONT
206B	6310	INNER SHAFT	206040222005	OUT OF ROUND	20031119005	ONT
206B	6510	BEARING HANGER	2060403459	CRACKED	20031021012	PNR
206B	7120	ENGINE LEG	206062101013	DENTED/MARKED	20031117005	ONT
206B	7120	ENGINE MOUNT	206062111101	CRACK INDICATION	20031117006	PNR
206B 3	5302	LOWER SKIN		CRACKED	20031106002	QUE
206B 3	6410	T/R BLADE ASSY	206016201131	NEW	20031103006	QUE
206L	6340	ROTOR TACHOMETER	2060763731	WORN	20031001007	ATL
206L	7120	PIN	10048512	CORRODED	20031029007	QUE
206L	7323	SAME	SAME	U/S	20031031006	PNR
206L 1	2460	BATTERY	023470000	NEWLY OVERHAULED	20031005001	QUE
206L 4	5302	FITTING	206032409001P	CRACKED	20031212003	ONT
206L 4	6310	CAP ASSEMBLY	406040509101		20031126005	NCR
206L 4	6730	ACTUATOR EXTENSION	C4264269	BENT	20031120001	QUE
212	2910	LINE	70612J22OW234	CHAFED	20031110005	PAC
407	5350	CASTING	407030609101	IMPROPER INSTALL	20031104003	NCR
407	6310	CAP ASSY	406040509101		20031126003	NCR
407	6510	TR DRIVE SHAFT	B407040339101	FAILED	20031023007	NCR
412EP	2120	PLENIUM ASSY.	212073111001	OVERFLOWED	20031128006	QUE
412EP	7331	PRESSURE SWITCH	42D218	CRACKED	20031210008	QUE
412EP	7334	PRESSURESWITCH	412799232103	CRACKED/LEAK	20031114003	QUE
427	6520	TR G BOX SUPPORT	427034851101	CRACKED	20031105005	NCR
430	2400	ELECTRICAL LUG	AN44AWGN405	NEW	20031015001	NCR
BELLANCA						
7GCBC	8550	O-320-A2B			20031203005	ATL
8GCBC#	2750	CABLE ASSEMBLY	21903	FRAYED	20031217001	PNR
8GCBC#	2750	FLAP CABLE	19023	FRAYED	20031006002	ONT
8GCBC#	3221	FRAME TUBE	71470209L	BROKEN	20031203001	ONT
8GCBC#	3340	WIRE	33	CHAFED	2 SDRs	ONT
8GCBC#	3497	WIRES	186187192	WORN	20031128003	PNR
8GCBC#	5700	FUEL TANK SUPPORT	4149641497	CRACKED	2 SDRs	ONT
8GCBC#	5753	FLAP MOUNT	21583	CRACKED	20031128005	PNR
8GCBC#	5797	WIRE	3359	CHAFED	20031201004	ONT
BOEING						
727 22C	5552	ELEVATOR RIB	65174305	CRACKED	20031118011	PNR
727 223	2751	INDICATOR-FLAP	2061121	NEEDLE STICKING	20031023002	ATL
727 225	0000	NIL/UNKNOWN			20031222002	ONT
727 225	2130	BUTTERFLY VALVE	10604954	FAILED	20031030001	PAC
727 227	3231	MLG DOOR SEQUENCE	10605801	SPLIT OPEN	20031218001	PAC
727 243	0000	FUSELAGE		BURN	20031126012	QUE
727 243	2710	AILERON SYSTEM			20031212004	QUE
727 243	5330	FUSELAGE		CRACK	20031117004	QUE
727 243	5753	INBOARD FLAP ASSY		CRACKED	20031126011	QUE
727 260	2120	ISOLATION VALVE	32167441	FAILURE-INTERNAL	20031103002	ONT
737 201	5330	FUSELAGE MAIN			5 SDRs	ATL
737 217	2910	A SYSTEM PRESSURE			20031027005	PAC
737 217	3231	LINK	6546059		20031015003	PAC
737 217	5753	TRACK FITTING	69378535		20031218008	PNR
737 275C	3230	SPRING ASSEMBLY			20031109001	PNR
737 281	2100	VALVE	32194211		20031208004	PNR
737 296	5330	FUSELAGE MAIN			2 SDRs	ATL
747 433	3213	ACTUATOR(BOGIE TILT)	65B0150422		20031110001	QUE
747 475	2121	FAN	6212090001		20031020005	QUE
767 233	2597	HEATER TAPE	3051110137	BURNT	20031021001	QUE
767 233	3070	RIBBON HEATER TAPE		BURNT	20031218005	QUE
767 3Y0	3231	PRIORITY VALVE	709121		20031020004	NCR
767 333	2710	BOLT	251T16026		20031003002	QUE
767 333	2720	ELEVATOR CONTROL ROD			20031028001	QUE
767 333	5342	FUSELAGE, STABILIZER			20031027002	QUE
BOMBARDIER						
BD 700 1A10	3240	SAME	SAME		20031216006	QUE
CL600 2D24	2910	ENGINE DRIVEN PUMP	N6521123	UNKNOWN	20031107011	NCR
BRITISH AEROSPACE						
HS 125 700A	0000	NIL/UNKNOWN			20031007005	ONT
CANADAIR						
CL215 1A10	2721	THRUST BEARING			20031114008	PNR
CL215 1A10	5246	UP LOCK ACT LEVER	215260533	CRACKED	20031107017	PAC
CL215 1A10	5341	FITTING	21531033800	CRACKED	20031106008	PAC

MAKE/MODEL	ATA	PART NAME	PART NO.	PART CONDITION	SDR NO.	RGN
CL215 1A10	5511	RIB	21523107821	CRACKED	20031210006	PAC
CL215 1A10	5711	SPAR CAP		CRACKED	20031106005	PAC
CL215 6B11(CL415)	2730	CABLE ASSY	215T9250446	WORN	20031205006	QUE
CL600 2A12(601)	5210	BIELLE	6003189023	FISSURIE	20031128004	QUE
CL600 2A12(601)	7200	DOOR	NA	NA	20031113001	QUE
CL600 2B16(601 3A)	2760	BALL JOINT	M633741	SEPARATED	20031022001	NCR
CL600 2B16(601 3A)	5210	CONNECTING ROD	6003189023	CRACKED	20031216002	QUE
CL600 2B16(604)	3510	PAX OXYGEN CONTROL	6044441011	SCORCH DAMAGE	20031110008	NCR
CL600 2B19(RJ)	0000	ACCESSORY GEAR BOX			20031222006	NCR
CL600 2B19(RJ)	2211	FCC CARD	6229815704	SER# 655	20031023001	QUE
CL600 2B19(RJ)	2751	FLAP POSITION TRANS	601R930301	FAILED	20031006005	QUE
CL600 2B19(RJ)	2910	LINE	601R7514771		20031029001	QUE
CL600 2B19(RJ)	2910	TUBE ASSY RESERVE	601R7528657	CRACKED	20031107010	ATL
CL600 2B19(RJ)	2913	PUMP	848847		20031015002	QUE
CL600 2B19(RJ)	3140	ADC COMPUTER			20031024003	QUE
CL600 2B19(RJ)	3220	CL600 2B19			20031014008	NCR
CL600 2B19(RJ)	3230	UPLOCK ASSY	16600103		20031118012	QUE
CL600 2B19(RJ)	3234	NLG SELECTOR VALVE		LEAKING INTERNAL	20031127015	NCR
CL600 2B19(RJ)	3234				20031020001	NCR
CL600 2B19(RJ)	5210	C/P DEADBOLT	CDSP10154	BROKEN	20031105001	QUE
CL600 2B19(RJ)	5270	DOOR WARNING SYSTEM			20031017003	QUE
CL600 2B19(RJ)	5297	HARNESS			20031103001	QUE
CL600 2B19(RJ)	5297	SWITCH	840534		20031020003	QUE
CL600 2B19(RJ)	5610	CO-PILOT SIDE WINDOW			20031030006	NCR
CL600 2B19(RJ)	5610	L/H WINDSHIELD	NP1393219	CRACKED	2 SDRs	VAR
CL600 2B19(RJ)	5610	R/H WINDSHIELD	NP1393226	CRACKED	20031001001	NCR
CL600 2B19(RJ)	5610	WINDSHIELD			20031114002	NCR
CL600 2B19(RJ)	5710	R/H WINDSHIELD	NP13932110	CRACKED	20031001003	NCR
CL600 2B19(RJ)	5730	WING, PLATES/SKI			20031205003	NCR
CL600 2B19(RJ)	7100	ENGINE			20031030007	QUE
CL600 2B19(RJ)	7110	LOWER LEFT FIXED	22850081141		20031014007	NCR
CL600 2C10(RJ)	0000	TORQUE SHAFT			20031127012	NCR
CL600 2C10(RJ)	2420	AIR DRIVEN GENERATOR		FAILED	20031201001	QUE
CL600 2C10(RJ)	2820	PRIMARY EJECTOR	T99A378603		20031114001	NCR
CL600 2C10(RJ)	3414	ADS SYSTEM		LOST DATA	20031202004	QUE
CL600 2C10(RJ)	4900	AP[illegible]			20031020002	NCR
CL600 2C10(RJ)	5610	COCKPIT SIDE WINDOW		SHATTERED	2 SDRs	VAR
CL600 2C10(RJ)	5610	COCKPIT WINDOW		CRACKED	20031127013	NCR
CL600 2C10(RJ)	5610	R/H WINDSHIELD	NP1393226	CRACKED	20031001002	NCR
CL600 2C10(RJ)	7200	NIL/UNKNOWN			20031127014	QUE
CESSNA						
A185E	2700	CABLE	0510105325	FRAYED	20031215002	PNR
R172K	7120	CHANNEL BRACKET	05131329	CRACKED	20031216003	ONT
S550	2435	STARTER GENERATOR	230850041	WORN BEARINGS	2 SDRs	ATL
T182T	2520	RESTRAINT SYSTEM	5045164038088		20031217008	PAC
U206B	5512	DOUBLER	12120031	CRACKED	20031015014	ONT
U206G	5751	LEADING EDGE SKID	122008515	CRACKED	20031013001	PNR
U206G	8530	EXHAUST VALVE	654286	BROKEN	20031103004	ONT
150K	5511	LEADING EDGE RIB	04320016	CRACKED	20031027007	ONT
152	0000	RIB ASSEMBLY	0432001646	CRACKED	20031219001	ONT
152	2722	RUDDER BAR	04115262	CRACKED	20031015009	PNR
152	2820	FUEL LINE ASSEMBLY	040031158	CORRODED	20031211001	ONT
152	5510	BRACKET ASSEMBLY	04320049	CRACKED	20031212005	ONT
152	5524	HINGE HALF	0432001 71	WORN	20031031005	ONT
152	5711	AFT SPAR	042640032	CRACKED	20031015012	ONT
172M	2497	WIRING HARNESS		BURNT	20031205005	PNR
172P	2820	FUEL LINE	050042355	WORN	20031029006	ONT
172R	2842	SAME AS ABOVE	S33311	WRONG PART	20031104002	PAC
172RG	3497	POLYETHILENE TUBES	10711	MELTED	20031028002	ONT
175	5511	HORIZ STAB SPAR		BROKEN	20031021005	QUE
177RG	3233	BEARING	S24266	BROKEN	2 SDRs	PNR
180G	3210	RH GEAR ATTACHMENT	07900066	BROKEN	20031126006	ONT
182L	5510	BULKHEAD	07126153	CRACKED	20031015010	ONT
207A	5551	R/H FRONT HORIZON	12320131	CRACKED	20031113005	PNR
305A	8530	INTAKE GUIDE	UNKNOWN	LOOSE	20031107008	PAC
310L	5312	BULKHEAD	08130225	CRACKED	20031127011	ONT
337G	2750	CABLE	14901007	BROKEN STRANDS	2 SDRs	ATL
441	3221	DRAG BRACE	51420025	CRACKED	20031027006	PNR
441	5280	LANDING GEAR DOOR			20031117010	PNR
550	5753	FLAP OUTBOARD LH	CSNA6525125	DAMAGED	20031017008	NCR
550	7830	IDLER LINK ASSY	20200081	BROKEN	20031121002	PAC
560XL	2710	R/H WING AILERON	6660001 64	BROKEN	20031113014	QUE
650	2710	SPOILER CABLE ASSY	6260102439	FRAYED	20031113008	QUE
650	2730	L/H ELEVATOR ASSY	62342051	CHAFED	20031113007	QUE

MAKE/MODEL	ATA	PART NAME	PART NO.	PART CONDITION	SDR NO.	RGN
CHAMPION						
7ECA	3220	SPRING	21525	BROKEN	20031121003	PNR
CIRRUS						
SR20	7120	BOLT	AN817A	LOOSE	20031030003	ONT
CONVAIR						
580	3000	AILERON CONTROL			20031216004	QUE
DEHAVILLAND						
DHC 2 MKI	2820	ELBOW FUEL VALVE	C2P1107	CORRODED	20031127009	PAC
DHC 2 MKI	2823	FUEL SELECTOR VALVE	TC173007	CORRODED	20031127007	PAC
DHC 3	0000	LUG PLATE	C3W10433	CORRODED	20031205008	ONT
DHC 3	2731	ROD	C3CF4187	CHAFFED	2 SDRs	PNR
DHC 3	2750	FLAP CONTROL ROD	C3CF1709	CRACKED	20031014005	PNR
DHC 3	5341	STRUT ATTACH LUG	C3W255	CORRODED	20031205007	ONT
DHC 6 300	3242	BRAKES	95503774	FROZEN ON	20031120012	PNR
DHC 6 300	3246	MAIN WHEEL	9543077	SCRAP	20031022004	PNR
DHC 6 300	7500	BLEED AIR LINE	C6VW10263	BURST FLEX LINE	20031008005	QUE
DHC 7 102	2421	AC GENERATOR	AE2132MK6	SHAFT SHEARED	20031223003	ONT
DHC 7 102	3242	BRAKE ASSEMBLY	213293	LEAKING	20031015015	ONT
DHC 8 100	2435	STARTER GENERATOR			20031002001	QUE
DHC 8 102	2497	CONTACTOR	AA4N103	STUCK	20031031004	QUE
DHC 8 102	2731	CHAIN/CABLE ASSEMBLY	82700550001	FAILED	20031106004	ATL
DHC 8 102	2750	FLAP TORQUE TUBE	734382D	GROOVED	20031030004	ATL
DHC 8 102	2761	ACTUATOR	A44700009	CRACKED	20031029004	ATL
DHC 8 102	2761	SOLENOID VALVE	659603	SEPARATED/MISSING	20031211002	ATL
DHC 8 102	3120	CAPTAINS FLIGHT	73910193001		20031204003	ATL
DHC 8 102	3200	SPRING	104451	BROKEN	20031128007	ATL
DHC 8 102	5250	DEADBOLT HINGE	N/A		20031003003	ATL
DHC 8 102	5752	SPRING TAB MOUNT	85740011101	CRACKED	20031204002	ATL
DHC 8 200	0000	WHEEL ASSEMBLY		FRACTURED	20031222001	QUE
DHC 8 200	2900	HYD BRAKE LINE	AE2463509E02	RUPTURED	20031031003	QUE
DHC 8 200	5620	CABIN WINDOW	85323917001		20031202006	QUE
DHC 8 200	7321	MICROSWITCH			20031021003	QUE
DHC 8 300	2420	AC GENERATOR SYSTEM			20031017001	QUE
DHC 8 300	2435	START GENERATOR	223088002B		20031107013	QUE
DHC 8 300	2710	CABLE ASSY	82700563S001	INCORRECTLY INST	20031212002	NCR
DHC 8 300	3233	BUSHING	NAS759011	MISSING	20031022007	QUE
DHC 8 300	3425	FLT GUIDE COMPUTER	7003974722	INTERNAL SHORT	20031105002	QUE
DHC 8 311	3230	LINE DRAG STRUT	DSC252B4012		20031030005	QUE
DHC 8 311	5230	LINK ASSY	85230448001	BROKEN	20031106006	ATL
DHC 8 400	2120	RECIRCULATION	AP500219101		20031103003	QUE
DHC 8 400	2200	YAW/DAMPER ACTUATOR	C18112AA		20031106011	QUE
DHC 8 400	2210	AUTOPILOT SYSTEM			20031217007	QUE
DHC 8 400	2421	GENERATOR	11522184		20031107009	NCR
DHC 8 400	2435	STARTER GENERATOR			20031106009	QUE
DHC 8 400	2913	ENGINE DRIVEN PUMP		SHAFT SHEARED	20031002002	NCR
DHC 8 400	3150	TIMER AND MONITOR	4100S01806		20031107003	QUE
DHC 8 400	3160	INPUT / OUTPUT	C12432AA05		20031107007	QUE
DHC 8 400	3230	NLG PROX SENSOR			20031021011	NCR
DHC 8 400	3241	MLG HARNESS ASSY			20031217006	NCR
DHC 8 400	3241	WHEEL SPEED TRAN			20031022002	QUE
DHC 8 400	3246	MLG WHEEL ASSY		CRACKED	20031118008	NCR
DHC 8 400	3260	RH MLG DOWNLOCK	464505		20031023005	QUE
DHC 8 400	3320	LAMP HOLDER	404830	BURNT	20031124001	NCR
DHC 8 400	3350	EMERGENCY BATTERY		INTERNAL SHORT	20031017005	NCR
DHC 8 400	3420	COMPUTER	42000332501		20031125002	QUE
DHC 8 402	2913	HYDRAULIC PUMP			20031023008	QUE
DHC 8 402	7160	INTAKE HEATER	4100S0283	SHORTED	20031015018	QUE
DIAMOND						
DA 20 C1	2730	JAM NUT	AN3165	LOOSE	20031203006	ATL
DA 20 C1	2741	RELAY	VF465F11	STICKY	20031118009	ATL
DA 20 C1	7120	WASHERS	MS213061C	CUPPED, WORN	20031007001	ATL
DOUGLAS						
DC9 83	2120	PRESSURE REGULATOR	321417611	FAILED	20031114006	QUE
DC9 83	2150	FLOW CONTR VALVE	39613011	INOPERATIVE	20031201006	QUE
DC9 83	2730	ELEVATOR CABLE	S4913801CS38808	FAILED	20031120005	QUE
DC9 83	3080	AUGMENTATION VALVE	39271012	FAILED	20031208007	QUE
DC9 83	3425	SYMBOL GENERATOR		FAILED	20031204001	QUE
DC9 83	5610	COCKPIT WINDSHIELD	5887275505	FAILED	20031120009	QUE
EMBRAER						
EMB 120ER	3233	RETRACTION ACTUATOR	1959500004	UNSERVICEABLE	20031006001	QUE
EUROCOPTER DEUT						
BK117	2900	VALVE BODY MANIFOLD	10546641	CRACKED	20031003001	NCR
BO105 S CDN BS4	2821	FUEL LINE	3510541	LEAKING	20031126001	ONT
BO105 S CDN BS4	7120	BALL BEARING	601741	WORN	20031128001	ONT

MAKE/MODEL	ATA	PART NAME	PART NO.	PART CONDITION	SDR NO.	RGN
HAWKER SIDDELEY						
HS 748 2A	2422	INVERTER	MGH182100		20031118007	PAC
HS 748 2A	3242	BRAKE			20031119007	PAC
HS 748 2A	5700	WING STRUCTURE			20031121001	PNR
HUGHES						
369D	0000	HOUSING	369D25102	U/S	20031210009	PAC
369D	0000	INPUT GEAR	369D25434	UNSERVICEABLE	20031223005	PAC
369D	0000	T/R GEARBOX			20031223004	PAC
369D	2435	BELL, END DRIVE	150SG1028	LINER LOOSE	20031118010	PNR
369D	6210	M/R BLADE ATTACH	369A10045	SHEARED	20031107004	PNR
369D	6210	SAME	SAME	U/S	20031031007	QUE
369D	6220	DROOP STOP FOLLOWER	369A1228901	UNSERVICEABLE	20031117013	PAC
369D	6410	M/R BLADE PIN		BROKEN	20031126009	PAC
369D	6500	T/R O/P GEAR	369D25430	BROKEN	20031222003	PAC
369D	6520	OUTER RACE	369A53525	U/S	20031210007	PAC
369D	6520	T/R GEARBOX			20031222005	PAC
369D	6710	BRACKET SUPPORT	369A7304	U/S	20031124002	PAC
369E	6300	CLUTCH	369A535051	UNSERVICEABLE	20031222004	PAC
ISRAEL						
ASTRA SPX	0000	BRACKET	25W26110200		20031125003	ONT
ASTRA SPX	5280	LANDING GEAR DOOR			20031028005	NCR
LEARJET						
35	2710	CABLE	2300003231		20031002003	NCR
35A	3242	TORQUE TUBE	9550634	CRACKED	20031127002	QUE
35A	3297	DIODE	R3100415	USED	20031125001	QUE
45	3520	PRESSURIZATION	6621300000025	SERVICEABLE	20031126010	PNR
60	3244	TIRE	178K431	SEPARATED	20031028006	QUE
MORAVAN						
Z242L	2750	SPRING	Z4243300014	BROKEN	20031201009	ONT
PIAGGIO						
P180 AVANTI	7310	SHUT OFF VALVE			20031027001	ONT
PILATUS						
PC 12 45	2133	SOLENIOD	9631411001		20031210001	ONT
PC 12 45	2430	GEN 2 CONTROL UNIT	9882115103		20031120003	ONT
PC 12 45	2612	QUICK RELEASE	9751210099	WORN	20031118001	QUE
PC 12 45	2742	PITCH TRIM ACTUATOR	9787314202	INOPERATIVE	20031120004	QUE
PC 12 45	2750	LINK	5275212133	BENT	20031208006	ONT
PC 12 45	2752	FLAP ACTUATOR	9787320308	BINDING	20031023006	ONT
PC 12 45	2752	FLAP POWER DRIVE	9787320003	FAILED	20031022009	PNR
PC 12 45	3230	RELAY	9740926112	FAILED	20031208003	ONT
PC 12 45	3420	A/P MODE CONTROL			20031029003	ONT
PC 12 45	5230	DOOR CABLE	5523512071	BROKEN STRAND	20031208002	ONT
PC 12 45	5240	SHOCK STRUT	5711012353	WORN	20031020008	ONT
PC 12 45	5610	SEAL	UNKNOWN	DELAMINATING	2 SDRs	ONT
PC 12 45	7930	WIRES	K11A24NK10A24	FRAYED	20031218007	ONT
PC 12 45	8011	STARTER GENERATOR			20031021010	ONT
PIPER						
PA23 250	5711	DRAG LINK FITTING		CRACKED	20031022010	ONT
PA28 140	2750	BOLT	400673	WORN	20031014002	PAC
PA28 140	5345	CABIN SEAT FRAME		CRACKED	20031014001	PAC
PA28 160	2424	VOLTAGE REGULATOR	756055	FAILED	20031028004	PNR
PA31	3230	LANDING GEAR RETRACTOR			20031205015	PAC
PA31	3260	LANDING GEAR POST			20031205016	PAC
PA31 350	3230	LANDING GEAR RETRACTOR			20031117012	PNR
PA31 350	3231	PISTON	757500	CRACKED	20031121004	ATL
PA31 350	3610	PNEUMATIC PUMP	442CW6	WITHOUT VISUAL	20031119008	PNR
PA31T	7197	E232 CONNECTION		BROKEN WIRES	20031205002	PNR
PA44 180	3230	DOWNLOCK SPRING	6720300	BROKEN	2 SDRs	ONT
PIPER AEROSTAR						
PA60 600	5740	FITTING	20001201	CRACKED	20031106003	PAC
ROBINSON						
R22 BETA	6220	SPINDLE BEARING	SA1581	ROUGH	20031119001	PNR
R44	5302	TAILCONE	C0231	CRACKED	20031205009	PNR
R44	5311	FRAME ASSY			20031029005	PAC
R44	8530	ENGINE			20031028010	PNR
SAAB						
SF340A	2720	BOLT	NAS62038	BROKEN	20031104001	QUE
340B	0000	BEARING ASSY	1388920629	SCRAPED	20031113013	QUE
340B	3251	YOKE ASSY	3811070101	BROKEN	20031118003	QUE
SCHWEIZER						
269C	6240	DRIVE CABLE	269A46193	CORRODED	20031212006	ONT
SHORT&HARLAND						
SD3 60	3310	LAMP	8623	DEAD SHORT	2 SDRs	PAC

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SIKORSKY						
S58E/T	6220	PISTON ROD	S161026005	SEVERED	20031110006	PAC
S58E/T	7230	POWER ASSEMBLY			20031110007	PAC
S61N	6210	POCKET ASSY	S611520107	CRACKED	20031212001	PAC
S61NM	6310	OILITE BUSHING	6135020459102	NEW	20031209002	PAC
S61NM	6320	BEARING	6135345133	NEW	20031208008	PAC
S76A	7921	DUCT	0401272820	SEPARATING	20031120008	PAC
SWEARINGEN						
SA226AT	3250	LANDING GEAR STE			20031006008	PNR
SA226AT	4940	PRESSURE SWITCH	980871103P261	CRACKED	20031209004	PAC
SA226TC	3230	HOSE	1114174S0135	LEAKING	20031110004	PNR
SA226TC	5101	AIRCRAFT STRUCTURE			20031008006	PNR
SA226TC	5230	RECEPTACLE	2720063907	CRACKED	20031015021	PAC
SA227AC	2400	AIRCRAFT			20031017006	ONT

engines

ALLIED SIGNAL						
ALF-502L	7200	ENGINE			20031118004	QUE
ALLISON						
250-C20B	6320	GEARBOX		METAL CONTAMINANT	20031117011	ONT
250-C20R	7250	FUEL CONTROL UNIT	23070108	FAILED	20031017004	PNR
250-C20R	7250	TURBINE	23038160	FAILED	2 SDRs	ATL
250-C20R	7322	FUEL CONTROL UNIT	23070609	FAILED	20031120010	ATL
250-C30S	7250	AFT LABYRINTH SEAL	6893647	FAILED	20031010002	PNR
AVCO LYCOMING						
ALF-502R-5	7230	ENGINE	ALF502R5	DAMAGED	20031014006	PAC
ALF-502R-5	7261	OIL PUMP DRIVE	208313801	SPLINE WORN	20031104004	PAC
IO-360-L2A	8520	CRANKSHAFT	13B27121B	CORRODED	20031002005	ONT
O-235-L2C	8520	SHAFT	61151	LOOSE	20031015016	QUE
O-235-L2C	8550	OIL DRAIN VALVE	S19515	FAILED	20031113002	ONT
O-320-H2AD	7414	BREAKER POINTS	ES10384585	WORN	20031015011	ONT
O-320-H2AD	8520	ENGINE	O320H2AD	LEAKING	20031114005	PNR
O-320-H2AD	8530	RINGS	ST203	NEW	20031217002	PNR
O-540-A1C5	8530	EXHAUST VALVE		CRACKED/BURNT	20031014004	PAC
O-540-A1C5	8530	PISTON PIN PLUG	LW11775	WORN	20031014003	PAC
TIO-540-AF1B	8530	ENGINE			20031103007	ONT
TIO-540-A2B	8530	PISTON COOLING JET	73772	SMASHED	20031215001	ONT
TIO-540-A2C	8500	ENGINE		FAILED	20031021004	PNR
TIO-540-F2BD	8540	TURBO CHARGER			20031201005	PNR
TIO-540-J2BD	7314	ENGINE DRIVEN FU	RG9080J7AM		20031004001	PNR
BOMBARDIER ROTAX						
912 F3	7322	DIAPHRAGM	861115	SWOLLEN	2 SDRs	ONT
912 F3	8530	BENT SOCKET 80 D	922230	CRACKED	20031223006	ONT
CFM INTERNATIONAL						
CFM56-5A5	7200	ENGINE			20031024002	QUE
CFM56-5C4	7230	TURBINE ENGINE			20031113009	QUE
CFM56-7B22	7510	FASTENERS	AS323710	LOOSE	20031117015	PNR
GARRETT						
TFE731-2-2B	7922	TEMP CONTROL VALVE	1584653	ERRATIC	20031009003	QUE
TFE731-40R-200G	7310	FUEL PUMP			20031024007	PAC
TFE731-5R-1H	7200	GARRETT			20031125004	ONT
TPE331-10UA	0000	PLANETARY GEAR	8679225	CRACKED	20031224002	PNR
TPE331-10UA	7200	TURBINE ENGINE			20031105003	ONT
TPE331-10UA	7920	OIL FILTER	GT331	DAMAGED	5 SDRs	PNR
TPE331-10UGR	7230	COMBUSTION CASE	310166811	CRACKED	20031020011	PNR
GENERAL ELECTRIC						
CF34-3A1	4920	APU	601R9703011	FAILED	20031217005	QUE
CF34-3A1	7200	ENGINE TURBINE			3 SDRs	QUE
CF34-3B1	7920	TUBE-HEAT EXCHANGE	5085T10G01	CHAFED	20031211004	ATL
CF34-8C1	7310	FUEL METERING UNIT		DEFECTIVE	2 SDRs	QUE
PRATT & WHITNEY						
JT8D-15	7200	ENGINE			20031203004	PNR
JT8D-219	2820	CABLE FUEL LEVER	S4913808AS12722	BROKEN	20031021007	QUE
JT8D-219	4920	APU GEARBOX CASING		SHEARED	20031106007	QUE
JT8D-219	7120	WASHER	6252220928	FAILED	20031202001	QUE
PT6A-114A	7250	SEGMENT RETAINING	3020159	COLLAPSED	6 SDRs	PNR
PT6A-20	7200	NF GOVERNOR			20031119002	PAC
PT6A-27	7920	OIL FILTER	3033315	DAMAGED	20031029002	PNR
PT6A-28	0000	TURBINE ENGINE	3028004	NEW	20031224003	ONT
PT6A-28	6120	REVERSING LEVER	3011543	CRACKED	20031105004	PNR
PT6A-34	7310	FUEL LINE	3011857	RUPTURED	20031016001	ONT

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PT6A-41	7260	ENGINE		FAILED	20031128002	ATL
PT6A-50	6100	RUNNER	3022797	LOOSE	20031210003	ONT
PT6A-50	7200	ENGINE		FAILED	20031103005	ATL
PT6A-65B	6122	PY LINE	3032125	CRACKED	20031016003	PAC
PT6A-67B	2435	ST/GEN SEAL	3022376	LEAKING	20031120002	PNR
PT6A-67B	2435	STARTER GENERATOR	23085024	OVERHAULED	20031022005	PNR
PT6C-67D	7200	ENGINE		FAILED	20031120011	VAR
PT6T-3	7200	COMPRESSOR TURBINE		FAILED	20031028009	PAC
PW120A	7310	TUBE ASSY-ENGINE	82820127101	U/S	20031216005	ATL
PW123	7530	P3 VENTURI PIPE	311269001	CRACKED	20031211005	ATL
PW4060	7931	ENGINE OIL PRESSURE			20031002004	QUE
R-985-AN-14B	8530	CYLINDER ASSEMBLY	399353		20031015017	PAC
ROLLS ROYCE						
BR700-715A1-30	7200	TURBINE SECTION	MODULE41	FAILED/OVERHEAT	20031126002	NCR
RB211-535E4-37	7320	TRANSIENT PRESSURE	ETPU10002C	FAIL BITE	20031006009	PAC
TAY 611-8	7532	PLATE	EU13933	WRONGLY MANUFACTURED	20031127006	QUE
TELEDYNE CONTINENTAL						
IO-470	8011	SHAFT GEAR	CAM539568	FAILED	20031021009	ONT
IO-470-L	8530	CAM FOLLOWER	628488	SPALLING	20031021008	ONT
IO-520-D	8530	CYLINDER ASSEMBLY	AEC631397SNA	SEPARATED	20031001005	QUE
IO-520-M	8530	CYLINDER	646657A2	CRACKED	20031210002	PNR
O-200-A	8500	ENGINE		FAILED	20031119003	QUE
O-470-11	8530	INTAKE GUIDE	UNKNOWN	LOOSE	2 SDRs	PAC
TSIO-360-CB	8540	COUPLING	12509291		20031119004	PAC
TURBOMECA						
ARRIEL 1B	7421	IGNITOR	SC2036	BROKEN	20031205004	PAC
ARRIEL 1B	7421	IGNITORS	9550175400	FAILED	20031127004	PNR
ARRIEL 1D1	7310	FUEL LINE	0301007710	BROKEN	2 SDRs	PAC

propellers

DOWTY AEROSPACE						
R408/6-123-F	6120	BUS BAR	697070212	SHORTED	20031105006	ONT
R408/6-123-F	6120	PITCH CONTROL UNIT	697073001A		20031218002	ONT
DOWTY ROTOL						
R212/4-30-4/22	7322	SEAL		FAILED	20031007002	QUE
HAMILTON STANDARD						
14SF-23	6111	COLLAR, FRONT	802253180225	BROKEN,SEPARATED	20031202002	NCR
14SF-7	6111	BLADE COLLAR	8022532	CRACKED	20031211003	NCR
43E60-581	6111	RETAINER ASSY	70242	OVERHEAT	20031008002	ATL
MCCAULEY						
1A105/SCM7154	6114	PROPELLER	1A105SCM7154	INCLUSION	20031015008	PNR
2A34C66NP	6110	CYLINDER/O-RING	5262163312	WORN	20031015007	PNR

MAKE/MODEL	ATA	PART NAME	PART NO.	PART CONDITION	SDR NO.	RGN

equipment

ARTEX AIRCRAFT						
4530150	2562	TRANSPONDER EMERGENCY			20031202003	ONT
BENDIX CORP						
D6LN3200	7414	DISTRIBUTOR CAP	10682054	LOOSE	20031219002	PNR
EAAEROMARINE						
P0723E105P	2561	LIFE JACKET LIGHT	WARL8A		20031006007	ONT
JANITROL						
94E423	2140	PRESS DIFF SWITCH			20031002006	PNR
LAMAR						
DGR3	2424	A.C.U.	DGR3	UNSERVICEABLE	20031020007	PNR
LUCAS A AERO						
CASC501	7320	FUEL FLOW REGULATOR			20031209001	QUE
NARCO						
ELT910	2562	ELT	ELT910	FAILED	20031107012	PNR
POINTER						
400010	2562	ELT			20031017010	PNR
SLICK						
4372	7414	IMPULSE COUPLING	M3100	LOOSE	20031009001	ONT
TELEDYNE						
105005561	7414	CONDENSOR	10400615B	INTERNALLY OPEN	20031030002	ONT
UNITED INSTR						
UNKNOWN	3413	V.S.I.	7040		20031208001	ONT
WELDON						
421136	2822	BOOST PUMP	421136		20031028008	NCR

LEGEND

ATA Air Transport Association number defining assembly/system/component

SDR NO. TCA assigned SDR control number - please quote in any correspondence or inquiries

RGN TCA region of SDR submitter:

PAC = Pacific, **PNR** = Prairie Northern,
ONT = Ontario, **QUE** = Quebec,
ATL = Atlantic, **NCR** = Ottawa (HQ),
VAR = more than one Region

MAKE/MODEL	ATA	PART NAME	PART NO.	PART CONDITION	SDR NO.	RGN

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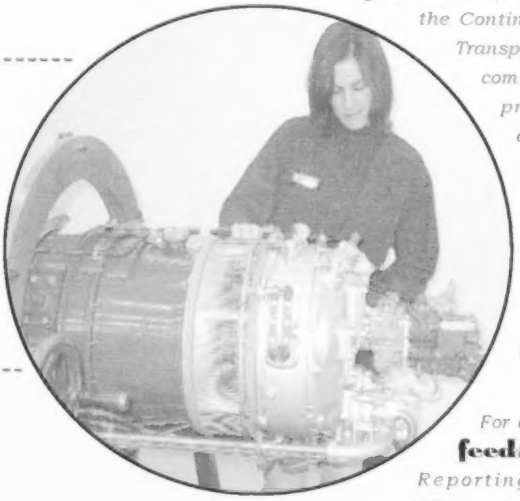

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